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GENERAL REGISTER OFFICE

MATTERS OF LIFE AND DEATH



LONDON

HIS MAJESTY'S STATIONERY OFFICE

1948

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THIS booklet is an experiment, to meet a need which has been put something like this. " You have in your Office a great store of facts about life, death, health, disease. Some of your publications are costly, and it isn't too easy for the plain man to find his way through them to what he ought to know. Why not produce a short, simple statement of the main facts ? "

It is not so easy. Much must be left out. Exactness in detail must give place to brevity, but without sacrifice of essential truth in the broad picture presented. The urge to footnotes, parentheses, qualifications, must be resisted.

Here is our attempt. We believe it has been worth trying. We would greatly welcome opinions and constructive criticism ~~from~~.

For the title I am indebted to *The Lancet*.

GEORGE NORTH

REGISTRAR-GENERAL.

*General Register Office,
Somerset House,
London, W.C.2.*

May, 1948.

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FROM DOOMSDAY BOOK TO TO-DAY

FOR many centuries after the Norman conquest the population of this country remained small. It was a period of slow growth interspersed with heavy losses, by far the greatest of which was due to the Black Death (plague) which ravaged the country in 1348 and 1349 and reduced the population by anything from one third to a half. It is held by historians that, in spite of these repeated losses from war and disease, the population of England increased in some six centuries from the estimated one and a half millions of Doomsday Book to five and a half millions in 1700. There was still no systematic recording of the basic facts about the number and condition of the people.

CENSUS AND REGISTRATION

An attempt to pass a Census Bill in 1753 drew considerable opposition. Critics described it as "totally subversive to the last remains of English liberty," and even "feared lest some great public misfortune or an epidemical distemper should follow the numbering." During the latter part of the eighteenth century, conditions of life in England and Wales were transformed as crowded townships sprang up round the new factories of the North and Midlands, and fears were being expressed that the population of the country might outrun the means of subsistence. In 1800 the first Census Act was passed, and in the following year the population of England and Wales was found to be just under nine millions. (At this time the population of Scotland was about one and a half millions, of Ireland between five and six millions, and of France about twenty-seven millions).

Growing interest at the beginning of the nineteenth century in the measurement of changing social conditions was in part responsible for the establishment of a national system of registration of births, marriages and deaths. An Act of Parliament of 1836 ("Whereas it is expedient to provide the means for a complete register . . .") created a new Department, the General Register Office, with a Registrar-General at its head. The new system of registration, basically the same in most essentials as that in force to-day, made it possible for the first time to obtain reliable records of births, marriages and deaths occurring in the country year by year and, in the words of Lord John Russell, enabled

the Government to acquire a general knowledge of the state of the population. The taking of the population census also became the responsibility of the General Register Office, and in 1841 the local machinery of the registration service was first used for the purpose. Thus there was made available for the first time systematic material, on a national scale, for the detailed study of population growth, the underlying facts of which had hitherto been in the main matters of mere conjecture. From the outset, the statistical value and possibilities of the new material were fully appreciated by Dr. William Farr, who was Statistical Superintendent for the first forty years of the life of the new Department.

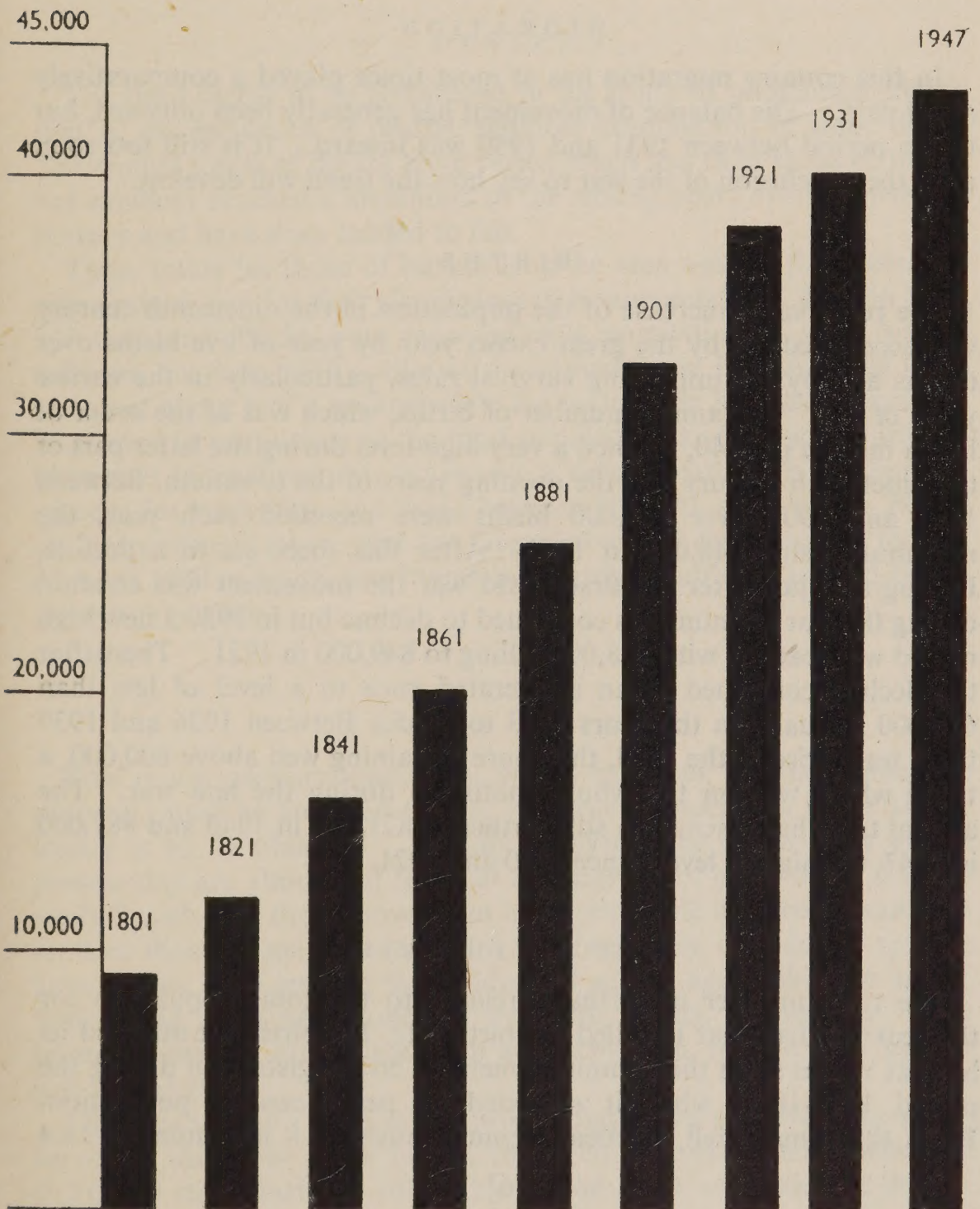
POPULATION GROWTH IN NINETEENTH AND TWENTIETH CENTURIES

The nineteenth century saw a steady rise in the population of England and Wales, at an unusually high rate of increase. The nine millions of 1801 became twenty millions by 1861, thirty two and a half millions by 1901, that is, more than trebled in a century. (See Fig. I and Table A, page 17).

During the twentieth century the increase has so far continued, but at a much reduced rate. The thirty-six millions of 1911 had increased to just under thirty-eight in 1921. In 1931 almost forty millions were enumerated, and the latest estimate of population (1947) shows a total of rather more than forty-three millions.

FIG. I POPULATION OF ENGLAND AND WALES
1801—1947

(Population in Thousands)



ELEMENTS IN THE STORY

THERE are three factors which determine whether a population shall increase or decrease—the factors of migration, births and deaths.

MIGRATION

In this country migration has at most times played a comparatively small part. The balance of movement has generally been outward, but in the period between 1931 and 1939 was inward. It is still too soon after the conclusion of the war to say how the trend will develop.

BIRTHS

The remarkable increase of the population in the nineteenth century was accounted for by the great excess year by year of live births over deaths and by the improving survival rates, particularly in the earlier years of life. The annual number of births, which was of the order of half a million in 1840, reached a very high level during the latter part of the nineteenth century and the opening years of the twentieth. Between 1891 and 1909 over 900,000 births were recorded each year, the maximum being 948,000 in 1903. After this there set in a decline. During and just after the first world war the movement was erratic: during the war the numbers continued to decline but in 1920 a new high record was reached with 958,000 falling to 849,000 in 1921. Thereafter the decline continued at an accelerated pace to a level of less than 600,000 annually in the years 1933 to 1935. Between 1936 and 1939 there was a rise in the total, the figure remaining well above 600,000, a trend which was on the whole continued during the late war. The annual total has since risen still further to 821,000 in 1946 and 887,000 in 1947, the highest levels since 1920 and 1921.

THE BIRTH RATE

The total number of births is related to the total population for the year to give what is called the birth rate. The birth rate attained its highest values since the commencement of civil registration during the period 1865-1880, when it exceeded 35 per thousand population. From that time it fell practically continuously to a minimum of 14.4

in 1933, when the long decline appears to have been arrested, though in the first years of the late war, 1940 and 1941, it fell even lower, the rate of 13.9 in 1941 being the lowest ever recorded. Thus the birth rate had already begun to decline when the total number of births in a year was still rising, and it was a considerable time before its continued fall was reflected in a reduction in the total of births.

DEATHS

The third factor to be considered in the study of population trends, that is, the incidence of deaths, requires examination in some detail. The annual totals of deaths have varied much less than those of births, but similarly reached a maximum in the closing years of the nineteenth century and have since tended to fall.

These totals (as those of births) must be seen against the constantly rising population for their significance to be appreciated. Thus in 1841, 343 thousand deaths were recorded in a population of some sixteen millions, but from 1870 until now the annual figure has remained fairly steady at about half a million while the population has nearly doubled. Expressed in proportion to the total population, and avoiding any refinements of analysis, this represents a crude death rate of some 22 persons for every thousand living between 1840-70, after which period an improvement set in, and the rate of about 12 per thousand recorded from 1920 onwards was maintained fairly steadily during the period between the wars.

LENGTH OF LIFE

This crude proportionate rate, whilst sufficient for the immediate purpose, must be analysed further if a true appreciation of its significance is to be obtained. Broadly speaking, the death rates of the present day are about half those of a century ago, but a more detailed study reveals that the improvement in length of life has been greater for females than for males, and that it has been very different at varying ages. It has been greatest for children of school age ; children under 5 years old come next, followed by young adults. From age 35 the improvement has diminished with advancing age, so that after age 75 it is very slight.

This means that a child of the present day has a far better chance of surviving the early years of life than the Victorian child, although childhood still remains a vulnerable period. For example, the deaths

of children in the first year of life in the period 1841 to 1850 were 153 in every thousand live births. This figure, known as the Infant Mortality rate, was unchanged up to the turn of the century but afterwards it declined rapidly ; it was below 50 from 1943 onwards and reached a low record of 41 in 1947. It is still too high judged by the modern experience of countries such as New Zealand and Holland.

Improvements in the death rates of children over one year of age began at a much earlier date. When this is coupled with the reduced numbers in the lower age groups brought about by the reduction in the birth rate in recent years, it is no surprise to find that in 1945 the proportion of deaths of children under 5 to the total mortality was about 8 per cent. as against nearly 40 per cent. a century before. On the other hand the proportion of deaths at ages 65 and over had changed from 18 to over 50 per cent.

Another feature revealed by a study of the death rates tabulated by the General Register Office is that in all times and at all ages women have had greater prospects of surviving than men. This tends to compensate for yet another apparently constant phenomenon, the greater proportion of male to female infants at birth.

Another way of measuring the improvement in chances of survival is by reference to the expectation of life at different ages over a period of years. For example, boys born in 1841 could, on average, expect to survive to the age of 40 and girls to 42 ; by 1901 these average expectations had increased to 48 and 52, and by 1931 to nearly 59 and 63.

COMPARATIVE MORTALITY FROM VARIOUS DISEASES

Considerable changes have taken place over the last century in the frequency of deaths due to certain diseases. The story of these changes is a long and complicated one, told in more than a hundred annual reports from the General Register Office, and it is possible to mention only a few examples. In 1848 alone there were 6,903 deaths from smallpox ; but in the five years 1941-45 there were only 3. In this recent period the average risk to a child under 15 years of age of dying from scarlet fever within a year was 1 in 100,000 ; but in 1871-75, seventy years before, it was 176 in 100,000. Some great change has taken place either in the disease itself or in the resistance to it. A reduction of the same degree has occurred in mortality from typhoid, and for this credit must be given to the great advances in sanitation and care of water and food supplies.

When considering changes in the death rate from a disease which tends to kill people in early life, like measles, or in late life, like apoplexy, we must take into account the changes in the proportion of children and old people in the whole population. A disease such as cancer is bound to produce more deaths during a year in a population consisting largely of old people than in another population of the same size consisting mostly of school children, and so a simple or crude death rate does not tell the real story. To overcome this difficulty the General Register Office uses a figure called the Comparative Mortality Index, obtained by finding the rates at which people died of the disease at successive ages in each year, and calculating the numbers who would have died at all ages combined if the population had maintained a steady age-composition. This provides a true comparison between the rates of dying from the disease in any two years. Tuberculosis mortality measured in this way was five times as great in 1861-65 as it was in 1941-45.

Some diseases were not so readily diagnosed during last century as they are to-day, with our X-rays and well equipped laboratories, and this accounted in part for the fact that the cancer index more than doubled between 1871-75 and 1931-35. In recent years, however, this index has been falling amongst women and it shows signs of approaching its crest for men. For cancer of some parts of the body death rates are coming down at every age ; for other parts they are falling at younger ages though not yet in the later periods of life, but for a few organs such as the lungs mortality seems to be increasing. The careful study of such facts as these points the way to investigators to ferret out *why*, and in the process of doing that the way to prevention or cure may be found. Statistics may be dull things and are much abused by cynics, but they have provided the necessary starting point for many of the advances in preventive and curative medicine and they will continue to do so.

Discovery of the sulpha drugs and of penicillin has resulted in some startling reductions in death rates of such diseases as erysipelas, pneumonia and appendicitis. As an example of what can be achieved quickly when a large part of the population makes up its mind to co-operate in a sustained effort to eradicate a killing disease, diphtheria is outstanding. At the beginning of this century year by year some 65 out of every hundred thousand children under 15 were dying of it, and during the period between the great wars the rate was still 29 and not improving. Then came the immunisation campaign inspired by the Ministry of Health ; by 1946 the rate was down to 4 and in 1947 it was only 2. It can be brought lower still if the people choose, but it can be kept down only by sustained effort on the part of the people as a whole.

In some diseases such as diabetes modern discoveries have greatly extended the span of life, though final cure may not have been achieved ; and death rates have been seen to fall in a dramatic way among young people while increasing at advanced ages. In a few other diseases such as infantile paralysis and leukæmia, mortality is rising despite all remedies. The knowledge that this is so stimulates more intensive research until, sooner or later, an effective remedy or preventive measures are found.

The study of the behaviour of death rates and notification rates in recent years, while giving no excuse for complacency, furnishes great encouragement to continue the attack upon fatal diseases by every possible means. The old idea that, apart from ageing and accidents, there is a hard core of disease never likely to yield to such efforts is no longer tenable. It may indeed be true to say that the time is not too far off when the death of a school child from any cause other than violence will be a rarity and a matter for reproach.

THE STUDY OF SICKNESS

Mortality however is only one field in the study of improving vitality, and, with the great advances secured in the general expectation of life in recent years, increasing attention has been paid to the incidence of illnesses which do not prove fatal. Until 1944 no attempt had been made to obtain any measure of this in the population as a whole, except with regard to certain notifiable diseases, which comprise only a small fraction of all illnesses among adults. The rise and fall of the prevalence of illness, and its variation according to age, sex, occupation, size of family, kind of housing and degree of incidence as between town and country, could only be judged from the statistics of deaths. The total amount of incapacity caused by illness was unknown. National Health Insurance records, apart from covering only a section of the population, dealt only, and not very fully, with such illnesses as caused incapacity for four days or longer. A complete survey based on all medical records was ruled out if only on the ground of cost in time and labour.

To meet the need for systematic information as to the prevalence of illness, a plan for a field survey of illness and injury of all kinds was worked out for the Ministry of Health by the General Register Office and the Social Survey. This field survey is based on interviews with a selection of the population so contrived as to be representative of the country as a whole. The selection is made with the help of the local National Registration records of the adult civilian population, in such

a way that each part of the country and every type of community both urban and rural is proportionately represented. The persons thus chosen are visited by trained helpers employed by the Social Survey who seek their voluntary co-operation in giving information about their health during the preceding three months.

The tabulated information about illness and injury derived from the Survey of Sickness, as these enquiries are called, is published in the Registrar-General's Quarterly Returns. Study of this material has provided much hitherto unavailable information about the general incidence of illness and injury, the period of incapacity, the amount of medical and other professional advice sought, and other related matters. Appropriate commentary will appear from time to time in the Text volumes of the annual Statistical Review and possibly in other publications.

THE NUMBER AND CONDITION OF THE PEOPLE

CONTINUOUS and adequate replacement by new births is essential if a population is not to fall below a given level. This requirement is generally expressed by saying that the potential mothers, that is the women of reproductive age, in one generation must produce sufficient girl children to provide an equivalent number of mothers in the ensuing generation. If they fail, a higher ratio must be achieved by the next generation to make up for their parents' deficiency, a task which is the harder in proportion as their own numbers have failed to reach the required average.

Before the first world war, when successive censuses had been registering large and continuous increases in the population, a sufficiency of births was taken for granted but, when the population disturbance created by that war had subsided, it was seen that the birth rate was continuing to fall and that the growth of population was being arrested. Speculation accordingly grew over the question whether the population would remain stationary, or whether a decline, perhaps as marked as the earlier increase, might not soon begin.

PIONEER WORK

The first large-scale investigation made into the fertility conditions of this country had been conducted by the General Register Office before the war, during the Census of 1911. Although the enquiry had been limited to a statement from each married woman as to the duration of her marriage and the number of children born of it, there had been opened out a retrospect into conditions and changes throughout the previous half-century or more.

POPULATION REPLACEMENT

It was becoming necessary to evaluate the fertility tendencies of the country in more specific terms. For this purpose, the idea of a test of sufficiency was introduced by the General Register Office in 1926 and the "Reproduction Rate," as it is now called, is at present employed as the index of population replacement, for showing the extent to which mothers of one generation are producing more or fewer mothers

for the next. The reproduction rate during the nineteenth century was well above the standard necessary to maintain the population ; for example, between 1850 and 1880 the rate was some 50 per cent. above that standard. By 1922/1923 the rate had fallen below the standard and remained below until 1946 and 1947 ; in these years it rose to 11 per cent. and 20 per cent. above the standard.

THE MARRIAGE FACTOR

Another important factor on which light was thrown by the records and statistics of the General Register Office was that of the marriage habits of the nation. Fertility is mainly determined at any time by the total married women of reproductive age, the length of time they have been married and the number of children they have already borne. More than nine-tenths of births occur to women between the ages of 20 and 40. The proportion of married women within this age-group rose until 1871, fell slightly until 1911, then began to rise again. Marriages occurring between 20 and 30 have always accounted for between two-thirds and three-quarters of the total marriages. Up to 1871 age at marriage was relatively low, and the rates of marriage and therefore the proportion of married to unmarried women were high, the rates for women aged 20-25 being very considerably higher than those for the 25-30 group. In 1871 commenced a fall in marriage rates at all ages and by 1911 the rate for ages 20-25 was less than that for the 25-30 group—in other words, the age at marriage was increasing.

THE POPULATION (STATISTICS) ACT, 1938

The Population (Statistics) Act, 1938, greatly enlarged the material obtained at the registration of births and deaths. Under this Act additional information (for confidential statistical use by the Registrar-General) regarding marital history and previous children has been required in respect of every birth, live or still, and of certain deaths, registered since 1st July, 1938. During the passage of this legislation there was considerable agitation directed against what was alleged to be an excessive inquisition into the affairs of the individual, but in practice the Act has worked smoothly. Such gaps as do exist in the records are due in most cases to lack of knowledge of the necessary information at the time of registration and not to any lack of co-operation from the public.

The material at the disposal of the Registrar-General before the Act of 1938 (namely, regular population estimates founded on census figures corrected annually by allowances for total births, deaths and

migration) already shewed how many people there were of various ages and of each sex, and the proportion married : thus, totals of births could be related, for instance, to the number of married women aged between fifteen and forty-five. The 1938 Act made it possible for the first time to relate the numbers of births to the exact ages of the mothers, and the duration of their marriages. The additional information thus available is of great value to the study of population trends.

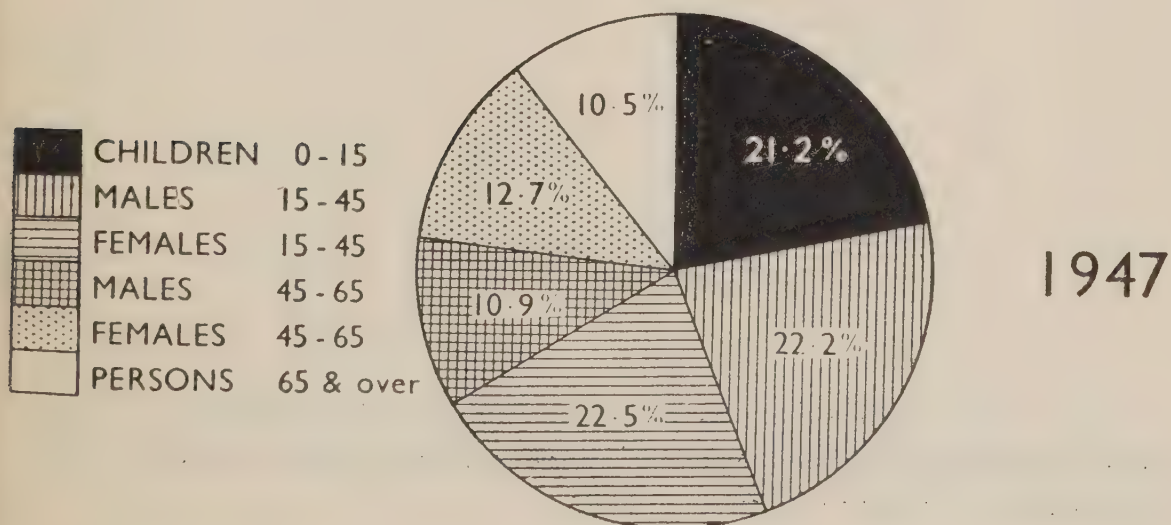
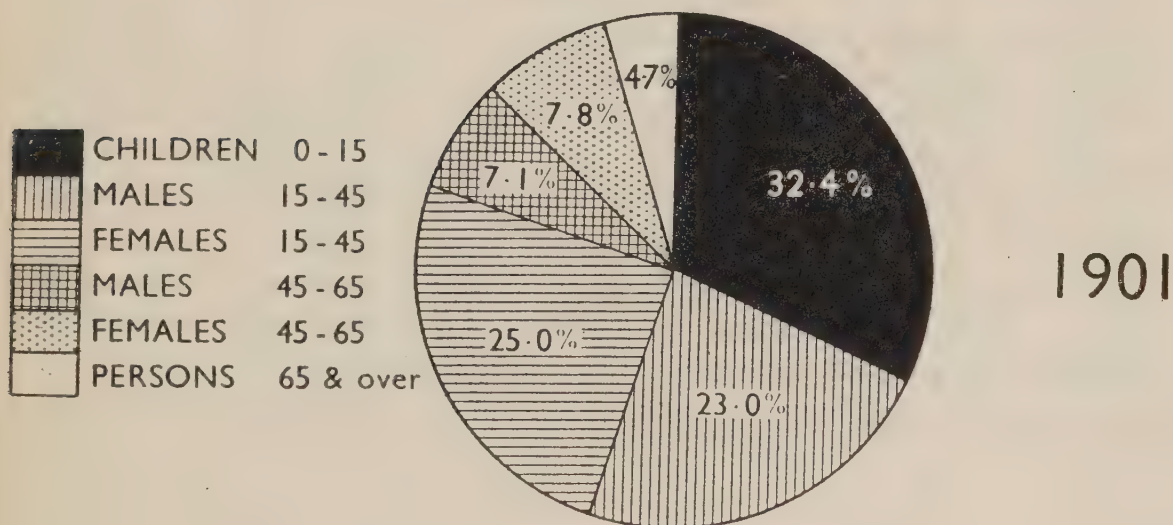
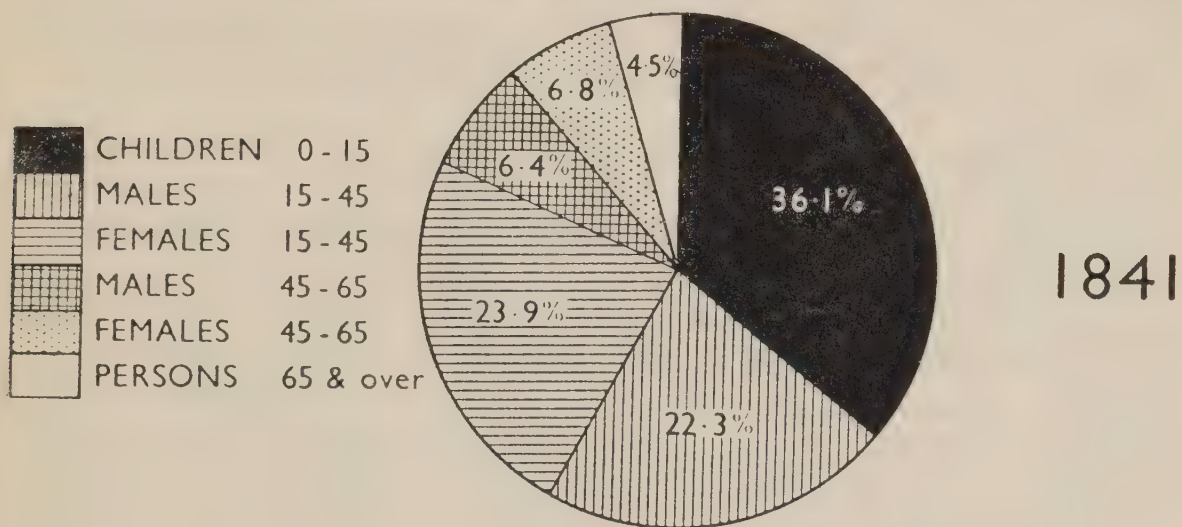
CONCLUSION

The population of this country increased very rapidly during the nineteenth century but the increase slowed down after the first decade of the twentieth century while the birth rate had fallen long before that. This bulk increase which is the result of the excess of births over deaths and of migration has been influenced by a great improvement in the death rate in the earlier years of life resulting in an improvement in the general expectation of life. This increased longevity however has tended to obscure the real facts of the situation, for it has given the illusion of an increasing population when in fact the increase may be found merely among the numbers of the aged (see Fig. II and Table B, page 18).

We may reasonably expect death-rates to continue to decline but, because of the low levels to which they have already fallen, the resulting gain in population is not likely to be great. Any forecast of the future birth-rate is a venture upon much more uncertain ground, since there are many variables and imponderables such as economic stresses, prevailing ideas of what size a family should be and even general national morale. The total of births was running steadily in the ten years before the late war at about 600,000, and, if this number were maintained and improvements in mortality rates continued, the population would ultimately be stabilised at about forty-one millions. In 1946 births totalled 821,000, a figure which was surpassed in 1947 with 887,000. But there begin to be signs of a slackening : for example, the number of births registered in the first quarter of 1948 was 202,000 which was less by 39,000 than the figure for the first quarter of 1947 but still 21,000 greater than the corresponding figure for 1946. The average annual number of births during the last 10 years was about 700,000 : if such an annual total were maintained, and improvements in mortality rates continued, the population would eventually increase to some forty-seven and a half millions and remain constant at that figure.

In March, 1944, the Government set up a Royal Commission to "examine the facts relating to the present population trends in Great

FIG. II AGE PROPORTION OF POPULATION OF ENGLAND AND WALES, 1841, 1901 & 1947



Britain ; to investigate the causes of these trends and to consider their probable consequences ; to consider what measures, if any, should be taken in the national interest to influence the future trend of population ; and to make recommendations.” The Commission’s report, which is awaited with interest, will bring the whole field under fresh authoritative review.

The statistics of the General Register Office, built up from registers and census schedules over more than a century, will continue to provide basic material for study of the social and economic life and needs of the people. They have provided a base for attacks on evil conditions and a foundation on which to build (and a yardstick by which to measure) the social services of to-day and the advances of preventive and curative medicine. The basic facts about the number and condition of the people are needed for a great variety of purposes, from the manufacture of prams to the purchase and distribution of food, the building of houses, the sharing of expenditure between the Exchequer and the local authorities. It is the citizen, through the information he gives at registration, census and special enquiry, the doctor and his allies, in diagnosis and noting of disease and cause of death and appraisal of treatment, and the local registrar in eliciting and accurately recording the facts, who provide the essential raw material on which the tabulations and commentaries of the General Register Office are built. No amount of “processing” at Somerset House could by itself cure weaknesses in the information as collected, and so this booklet concludes, as it should, with grateful acknowledgements to the individual citizen, to the doctor (especially the general practitioner) and his allies and to the local registrar for their ready co-operation at all times in our work.

*Note :—*This brief survey is based on the official publications of the General Register Office. A list of these is given in Appendix II, with an indication of their contents.

APPENDIX I

TABLE A. Total Population, Live Births, Marriages, Deaths and Infant Mortality. England and Wales. 1841-1947

| PERIOD | POPULATION | LIVE BIRTHS | MARRIAGES | DEATHS | INFANT MORTALITY DEATHS UNDER 1 YEAR PER 1,000 LIVE BIRTHS |
|--------|------------|-------------|-----------|---------|---|
| 1841 | 15,914,148 | 512,158 | 122,496 | 343,847 | 147 |
| 1851 | 17,927,609 | 615,865 | 154,206 | 395,396 | 154 |
| 1861 | 20,066,224 | 696,406 | 163,706 | 435,114 | 153 |
| 1871 | 22,712,266 | 797,428 | 190,112 | 514,879 | 158 |
| 1881 | 25,974,439 | 883,642 | 197,290 | 491,935 | 130 |
| 1891 | 29,002,525 | 914,157 | 226,526 | 587,925 | 149 |
| 1901 | 32,527,843 | 929,807 | 259,400 | 551,585 | 151 |
| 1911 | 36,070,492 | 881,138 | 274,943 | 527,810 | 130 |
| 1912 | 36,327,000 | 872,737 | 283,834 | 486,939 | 95 |
| 1913 | 36,574,000 | 881,890 | 286,583 | 504,975 | 108 |
| 1914 | 36,967,000 | 879,096 | 294,401 | 516,742 | 105 |
| 1915 | 37,291,000 | 814,614 | 360,885 | 562,253 | 110 |
| 1916 | 37,446,000 | 785,520 | 279,846 | 508,217 | 91 |
| 1917 | 37,531,000 | 668,346 | 258,855 | 498,922 | 96 |
| 1918 | 37,483,000 | 662,661 | 287,163 | 611,861 | 97 |
| 1919 | 37,362,000 | 692,438 | 369,411 | 504,203 | 89 |
| 1920 | 37,596,000 | 957,782 | 379,982 | 466,130 | 80 |
| 1921 | 37,886,699 | 848,814 | 320,852 | 458,629 | 83 |
| 1931 | 39,952,377 | 632,081 | 311,847 | 491,630 | 66 |
| 1932 | 40,201,000 | 613,972 | 307,184 | 484,129 | 64 |
| 1933 | 40,350,000 | 580,413 | 318,191 | 496,465 | 63 |
| 1934 | 40,467,000 | 597,642 | 342,307 | 476,810 | 59 |
| 1935 | 40,645,000 | 598,756 | 349,536 | 477,401 | 57 |
| 1936 | 40,839,000 | 605,292 | 354,644 | 495,764 | 59 |
| 1937 | 41,031,000 | 610,557 | 359,160 | 509,574 | 58 |
| 1938 | 41,215,000 | 621,204 | 361,768 | 478,996 | 53 |
| 1939 | 41,642,000 | 614,479 | 439,694 | 499,902 | 51 |
| 1940 | 41,862,000 | 590,120 | 470,549 | 581,537 | 57 |
| 1941 | 41,748,000 | 579,091 | 388,921 | 535,180 | 60 |
| 1942 | 41,897,000 | 651,503 | 369,744 | 480,137 | 51 |
| 1943 | 42,143,000 | 684,334 | 296,432 | 501,412 | 49 |
| 1944 | 42,449,000 | 751,478 | 302,714 | 492,176 | 45 |
| 1945 | 42,636,000 | 679,937 | 397,626 | 488,108 | 46 |
| 1946 | 42,850,000 | 820,719 | 385,606 | 492,090 | 43 |
| 1947 | 43,270,000 | 886,633 | 399,936 | 517,622 | 41 |

TABLE B. Populations by Age-groups. England and Wales. 1841-1947

| | 1841 | 1861 | 1881 | 1901 | 1921 | 1931 | 1947 |
|--------------------|------------|------------|------------|------------|------------|------------|------------|
| ALL AGES | 15,914,100 | 20,066,224 | 25,974,439 | 32,527,843 | 37,886,699 | 39,952,377 | 43,270,000 |
| AGES LAST BIRTHDAY | | | | | | | |
| 0-4 | 2,106,300 | 2,700,782 | 3,520,864 | 3,716,708 | 3,321,703 | 2,990,297 | 3,536,000 |
| 5-9 | 1,904,900 | 2,344,066 | 3,147,396 | 3,487,291 | 3,518,926 | 3,322,656 | 2,847,000 |
| 10-14 | 1,732,100 | 2,105,176 | 2,800,331 | 3,341,740 | 3,659,826 | 3,207,245 | 2,768,000 |
| 15-19 | 1,586,800 | 1,932,642 | 2,547,232 | 3,246,143 | 3,503,054 | 3,434,501 | 2,904,000 |
| 20-24 | 1,550,500 | 1,829,493 | 2,328,226 | 3,120,922 | 3,151,452 | 3,494,487 | 3,074,000 |
| 25-29 | 1,282,900 | 1,569,164 | 2,047,992 | 2,824,509 | 2,960,250 | 3,357,100 | 3,258,000 |
| 30-34 | 1,167,000 | 1,386,778 | 1,745,469 | 2,431,331 | 2,800,969 | 3,055,286 | 3,288,000 |
| 35-39 | 884,500 | 1,224,542 | 1,541,399 | 2,145,383 | 2,745,234 | 2,803,039 | 3,463,000 |
| 40-44 | 888,000 | 1,134,127 | 1,399,354 | 1,850,622 | 2,601,175 | 2,663,553 | 3,355,000 |
| 45-49 | 638,600 | 930,840 | 1,151,371 | 1,573,188 | 2,406,126 | 2,553,939 | 3,019,000 |
| 50-54 | 634,400 | 806,563 | 1,022,075 | 1,329,003 | 2,014,151 | 2,381,637 | 2,642,000 |
| 55-59 | 391,800 | 614,004 | 806,464 | 1,052,577 | 1,630,725 | 2,068,477 | 2,424,000 |
| 60-64 | 439,800 | 556,240 | 727,622 | 890,673 | 1,282,003 | 1,656,951 | 2,130,000 |
| 65-69 | 259,600 | 376,572 | 502,469 | 629,673 | 986,062 | 1,270,670 | 1,807,000 |
| 70-74 | 224,300 | 281,345 | 349,955 | 446,333 | 656,811 | 870,751 | 1,329,000 |
| 75-79 | 119,900 | 160,640 | 202,322 | 264,480 | 392,578 | 499,863 | 834,000 |
| 80-84 | 70,500 | 79,659 | 95,750 | 128,768 | 179,854 | 225,828 | 401,000 |
| 85 and over | 32,200 | 33,591 | 38,148 | 48,499 | 75,800 | 96,097 | 191,000 |

APPENDIX II

The following series of publications of the General Register Office are available for a detailed study of the vital statistics referred to in this booklet. Those for which a price is quoted are obtainable from H.M. Stationery Office ; the remainder are out of print but may be referred to in most public libraries.

1. *The Registrar-General's Weekly Return of Births and Deaths.*

A summary of birth and death registrations in the large towns of England and Wales, together with notifications of certain infectious diseases in all administrative areas, compiled from returns made by local registrars and medical officers of health.

Price 6d. net. By post 7d.

Annual Subscription £1 10s. including postage.

2. *The Registrar-General's Quarterly Return of Births, Deaths and Marriages.*

A summary of the births, deaths and marriages registered in the quarter, estimates of national and local populations and results of the Survey of Sickness.

Price 6d. net. By post 7d.

Annual Subscription 2s. 4d. including postage.

3. *The Registrar-General's Annual Statistical Review*, which is published in three parts, i.e. :

Part I (Medical) containing estimates of population, numbers of deaths, death rates, deaths by cause, sex and age, and notifications of infectious diseases in England and Wales.

Price 5s. 6d. net. By post 5s. 10d.

Part II (Civil) containing statistics of populations, marriages and births in England and Wales, and by regions and administrative areas, together with fertility tables based on information obtained under the Population Statistics Act, 1938.

Price 2s. 6d. net. By post 2s. 8d.

Text Volume, a commentary, with additional tables, on material published in Parts I and II. Price 4s. 6d. net. By post 4s. 9d.

The latest issues of these reports are for 1945 in respect of Parts I and II and 1938-39 in respect of the Text Volume. The next Text Volume to be issued will cover the years 1940-45.

4. *The Registrar-General's Decennial Supplement for 1931.*

Part I Life Tables. These are based upon the mortality experience in England and Wales as a whole during the three years 1930-32.

Price 3s. 0d. net.

Part IIa Occupational Mortality. This deals with the mortality experience of men in different occupations, of the wives of these men and of single women engaged in various occupations.

Price 17s. 6d. net. By post 18s.

Part IV Multiple or Secondary Causes of Death. This volume deals with a sample of the deaths registered during the decennium 1921-30 which were classified according to the Third Revision of the International List of Causes of Death. It shows the total frequency of occurrence for each separate cause, either as a primary cause to which the death is classified or as a subsidiary or secondary cause occurring in combination with another.

Price 12s. 6d. net. By post 12s. 10d.

5. *Census, England and Wales, 1931.*

Preliminary Report of the Population Enumerated in England and Wales (Administrative and Parliamentary areas) and in Scotland, Isle of Man and Channel Islands.

General Tables comprising statistics of population by age and marital conditions, birth place and nationality, and giving statistics of institutions and of the Welsh Speaking population.

Classification of Occupations giving a detailed list of occupations.

Classification of Industries giving a detailed list of industries.

Occupation Tables showing the distribution of the population by occupation.

Industry Tables showing the distribution of the population by industry.

Price 32s. 6d. net. By post 33s. 3d.

Ecclesiastical Areas (England) showing the Dioceses and their constituent parishes with populations.

Housing Report and Tables containing data obtained in regard to housing and private families.

County Reports, Part I of which gives statistics of the population in each administrative area, and Part II of which gives details of changes in boundary following the review of each County and rearrangements under the Local Government Act, 1929. The price of these volumes varies according to their size.

6. *Studies on Medical and Population Subjects.*

No. 1. *Regional and Local Differences in Cancer Death Rates*, by Percy Stocks, M.D., D.P.H., Chief Statistician (Medical), General Register Office. A detailed study based on an analysis of the returns of deaths. The first of a new series of occasional publications.

Price 1s. 0d. net. By post 1s. 2d.

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